



# Superfund Today

Focus on Revisions to Superfund's Risk Assessment Guidance

## Projects Underway to Address Priority Risk Assessment Issues

The U.S. Environmental Protection Agency (EPA) has identified four key issues to address in the upcoming revisions to the *Risk Assessment Guidance for Superfund (RAGS)*. These issues are Community Involvement in the Risk Assessment Process, Land Use Considerations, Establishing Background for Risk Assessment Purposes, and Uncertainty / Probabilistic Analysis. EPA selected these topics based on input received by the Agency's own risk assessors and managers, as well as from stakeholders in the Superfund process at the two outreach meetings convened by the International City / County Managers Association (ICMA) last Fall in San Francisco, CA and Washington, D.C.

EPA has created workgroups, with representatives from headquarters and the regional offices, to address the four issues. These workgroups are currently exploring ideas and options to be included in future guidance documents.

### Stakeholders Can Contribute!

This fall, EPA will make drafts of the guidance documents available to the public for comment. ICMA would like to convene a follow-up stakeholders meeting (tentatively in January or February 1998) to receive feedback on the drafts. This will be an opportunity for EPA to discuss the science and policies involved in developing the

guidance with stakeholders. EPA will revise and publish the documents in the Federal Register in the Spring of 1998. The final guidance, expected in December 1998, will address formal public comments received by the Agency on the draft documents.

### Why is EPA Revising the Risk Assessment Guidance for Superfund?

As part of the Administrative Reform for Superfund, EPA committed to update the 1989 Risk Assessment Guidance for Superfund to ensure that the Agency conducts reasonable and consistent Superfund risk assessments, including standardizing "pieces" of the risk assessment that vary little from site to site (e.g., exposure models or assumptions that may be appropriate for most sites). The guidance should also reflect the new developments in science and the importance of involving affected parties who have pertinent site-specific information (e.g., communities, governments, industry) in the decision-making process.

*In order to more fully participate in the guidance development process, attendees at the ICMA stakeholders forums requested that EPA produce this fact sheet periodically to update the public on the progress of the RAGS revisions.*

## Project Workgroups Focus on Priority Issues

### Community Participation

One of the very clear messages that came out of the stakeholder forums is that people who live near a Superfund site should have a meaningful role in the process of assessing and managing the problems and risks it poses. As a result of that feedback, the Community Participation Workgroup was established to consider how citizens can become more active participants in risk assessment and management efforts at Superfund sites. Even though risk assessment is technically complex and requires considerable scientific expertise, there are potentially many important ways in which citizens can and should contribute. For example, they can provide information on past or future land uses that will help risk assessors establish appropriate assumptions for their risk assessment calculations.

The Workgroup is looking at all aspects of the risk assessment process to come up with ways for risk assessors and citizens to cooperate more effectively in determining the threats posed by a Superfund site. The output

*Risk Assessment Guidance revisions will be issued periodically and highlight progress on the Risk Assessment Guidance for Superfund (RAGS) reforms.*

will be a concise, user-friendly reference of practices that can lead to more meaningful, satisfying, and ultimately successful Superfund risk assessments.

## Land Use Considerations

In the Superfund program, EPA tries to provide permanent cleanup for hazardous waste sites. In order to do that, consistent and responsible assumptions about how the site will be used in the future are needed. In May 1995 EPA issued a directive on land use with two major goals: (1) to encourage the use of reasonably anticipated future land use in cleanup investigations and decision-making at sites on the National Priorities List; and (2) to promote early discussions with the public, local governments, and local planning authorities to make better assumptions about reasonably anticipated future land use. However, the land use directive did not provide clear directions for how to involve the public.

In addition, with the new emphasis on reasonably anticipated future land uses, EPA and the stakeholders have identified the need for additional tools to assist in decision-making at sites where industrial land use is appropriate. Consequently, the Workgroup on Land Use Considerations is planning to

develop additional guidance providing technical methods for evaluating non-residential land use with a goal to develop a framework like the Soil Screening Level Guidance. This guidance will also address policy issues associated with the effective implementation of non-residential land use, including community involvement, and how to ensure reliable institutional controls.

## Establishing Background for Risk Assessment

EPA uses sampling data on background levels of contamination near the site to evaluate human and ecological risk and site remedies. Associated with this practice are recurring problems with sample size and locations, statistical procedures, and application of background data as a screening tool to identify chemicals of potential concern. These problems have led to inconsistent decisions within the Superfund Program.

Community stakeholders emphasize the need for EPA to develop consistent guidance, clear definitions, and background data and make them available to everyone. The output of this Workgroup will be key principles for the development and use of background data in risk assessment. Adherence to these principles should help ensure that the

background concentrations used in risk assessment are consistent with national policy and guidance.

## Uncertainty/Probabilistic Analysis

Recently there has been increased interest in better characterizing the variability and uncertainty in risk estimates using a variety of statistical methods, such as sensitivity analysis and bounding estimates. However, dialogue is needed among risk assessors, risk managers, and stakeholders concerning the "value added" by these techniques. Guidance is also needed on which tools are most appropriate for given situations and how these tools can be appropriately applied at individual Superfund sites.

The Workgroup on Uncertainty/Probabilistic Analysis will evaluate the implications of the EPA-wide uncertainty/probabilistic analysis policy on current activities in the Superfund program. Based on this analysis policy, the Workgroup will develop appropriate Superfund-specific policies and guidance as necessary. The Workgroup will also work with stakeholders and other EPA offices to evaluate ongoing program-specific activities related to uncertainty and probabilistic analysis.

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